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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,535	11/20/2003	Nicolas Roux	245509US41X CONT	6889
22850	7590	08/23/2005	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			NGUYEN, KEVIN M	
			ART UNIT	PAPER NUMBER

2674

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/716,535

Applicant(s)

ROUX, NICOLAS

Examiner

Kevin M. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 10/062,671.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>June 09, 2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is made in response to applicant's argument filed on 06/09/2005. Claims 1-22 are original, claims 23-30 are new, Thus, claims 1-30 are currently pending in the application. Applicant's arguments see pages 9-12, with respect to the rejections of claims 1-30 under the statutory basis for the previous rejection have been fully considered and are not persuasive. Therefore, the rejection has been maintained.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-5, 7-9, 11-16, 18-20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark et al (US 6,784,869) in view of Vaughan et al (US 5,905,497).
2. As to claims 1, 12, Clark et al teaches a cursor control display for a flight desk of an aircraft comprising:
 - a. At least one display window 206 (fig. 2) includes a plurality of objects associated with one of multiple functions 210 (fig. 2, col. 6, lines 60-64);
 - b. A cursor control device (CCD) 212 (fig. 2) including a cursor moving mechanism. The cursor is placed on the desired menu item (col. 5, lines 55-56) defined a main object marker.

- c. The switches 212a1, 212a2, and 212a3 (fig. 2A) defined an auxiliary control device including a discrete moving mechanism.

Accordingly, Clark et al teaches all of the claimed limitation of claim 1, except for “displacing an auxiliary object marker on the display object without affecting control of the main object marker.”

However, Vaughan et al teaches the center menu item 66 is highlighted (fig. 5, an auxiliary object marker) by using the discrete keys 22 (fig. 1, col. 5, lines 60-61). The ability selects a menu item without having to active another key in the continuous keys (cursor control key) (col. 6, lines 4-5).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Clark's switches 212a1, 212a2, and 212a3 including displacing an auxiliary object marker on the display object without affecting control of the main object marker, in view of the teaching in the Vaughan's reference because this would provide a simpler and quicker way for a user to select a menu item as taught by Vaughan et al (col. 6, lines 6-7).

3. As to claims 2, 7, 13, 18, Clark et al teaches cursor control devices (CCDs) 212, 220 (fig. 2) including a cursor moving mechanism and continuous manner. The cursor is placed on the desired menu item (col. 5, lines 55-56) defined a first activation mechanism. The switches 212a1, 212a2, and 212a3 (fig. 2A) corresponding to an auxiliary control device defined a second activation mechanism.
4. As to claims 3, 14, Clark et al teaches the switches 212a1, 212a2, and 212a3 (fig. 2A) which are separate stand-alone unit.

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5. As to claims 4, 15, Vaughan et al teaches a keyboard 18 which includes the discrete keys 22 (fig. 1).

6. As to claims 5, 16, Vaughan et al teaches the object (system menu 66, fig. 5) which are arranged to one vertical direction (see fig. 5) which are controlled by the arrow keys 22 on the keyboard 18 (see fig. 1).

7. As to claims 8, 9, 19, 20, Clark et al teaches menu 314 would include selections (not shown) which when selected display a control panel or second menu (i.e., submenu) of options (not shown) that can be selected. However, with the interactive functions (e.g., CHKL, COMM, FUEL, Alpha Menu etc.), it is necessary to either press the menu select switch 308c, or move the cursor to an inactive area before pushing the CCD function select switch 308b to display the menu 310 or 314 (col. 8, lines 7-14)

8. As to claims 11, 22, Clark et al teaches another set of the cursor control device and the auxiliary control device 220 (see fig. 2).

9. As to claims 24 and 28 (new), Clark et al teaches the left and right multifunction CHKL, COMN, and NAV (col. 6, lines 63-64) are display in the window 210 (fig. 2).

Thus, it would have obvious to provide CHKL, COMN, and NAV (the responsive objects) are arranged horizontally with respect to the window 210 as claimed.

10. As to claims 25 and 29 (new), Clark et al teaches at least the switches 212a1 and 212a3 (fig. 2A). Thus, it would have been obvious to provide the left and the right cursor keys 212a1 and 212a3 that must comprises the horizontal direction as claimed.

11. Claims 6, 17, 26, 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark et al in view of Vaughan et al as applied to claims 1, 12 above, and further in view of Yoshino et al (US 5,548,304).

12. As to claims 6, 17, Clark et al and Vaughan et al teach all of the claimed limitation of claims 1, 12, except for the main object marker has priority over the auxiliary object marker.”

However, Yoshino et al teaches a plurality of cursor control units A, B, C, D (fig. 18a) including the function of priority access levels of both main cursor and auxiliary marker (col. 12, lines 40-42).

Therefore, It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Clark’s cursor control device including the function of priority access levels of both main cursor and auxiliary marker, in view of the teaching in the Yoshino’s reference because this would prevent the confusion and the damage to the image information due to mistakes by a plurality of operators of lower ranks as taught by Yoshino et al (col. 3, lines 12-20).

As to claims 26 and 30 (new), Vaughan et al teaches in this priority case, the access acceptance levels of P1 will permit only the cursor under control of the instructor I so that the access acceptance level of page P1 is only that of the instructor’s cursor or higher (col. 12, lines 47-51). Thus, it would have obvious to provide the instructor’s cursor has priority over control of inherent auxiliary’s cursor (student’s cursor) are on the same window (the screen 31, fig. 18b) as claimed.

13. Claims 10, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark et al in view of Vaughan et al as applied to claims 1, 12 above, and further in view of Oder et al (US 5,475,594).

14. As to claims 10, 21, Clark et al and Vaughan et al teach all of the claimed limitation of claims 1, 12, except for the key is activated during an emergency mode of the aircraft.

However, Oder et al teaches the key 39 which activates the emergency menu 52 (fig. 6, col. 9, lines 34-45).

Therefore, It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Clark's auxiliary control device including the key 39 which activates the emergency menu 52, in view of the teaching in Oder's reference because this would provide the operator to access certain functions directly by a single action (pushing down the corresponding function key). These characteristics are obviously particularly advantageous in critical situations, and are reserved for particular functions, e.g. functions which are implemented when an important element (engine, etc.) of the aircraft fails.

15. Claims 23 and 27 (new) are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark et al in view of Vaughan et al as applied to claims 1, 12 above, and further in view of Muller et al (IDS cited, US 6,072,473).

16. As to claim 23 and 27 (new), the combination of Clark and Vaughan et al teaches all the subject matter claimed except for the use of an actuatable confirmation device configured to confirm the responsive object having the main object marker.

However, Muller et al teach a related dialog device which includes validation of the required area once it has been marked by the cursor (col. 5, lines 4-5). Thus, the validation means corresponds to the actuatable confirmation device as claimed.

Therefore, it would have been obvious to one of ordinary skill in the art to modify the combination of Clark's and Vaughan et al's input device including validation of the required area once it has been marked by the cursor, in view of the teaching in the Muller et al's reference, because this would provide the pilot must then validate his choice by an action on the validating means as taught by Muller et al (col. 5, lines 28-29).

Response to Arguments

17. Applicant's arguments filed 06/09/2005 have been fully considered but they are not persuasive.

In response to applicant's argument that claims 1 and 12 recite "an auxiliary control device including a discrete moving mechanism configured to cause a discrete displacement of an auxiliary object marker on the display, responsive object by responsive object, so as to designate a responsive object without affecting control of the main object marker." Examiner is not convinced by Applicant's argument. As stated *supra* with respect to claims 1 and 12, Examiner clarifies that Vaughan et al teaches, fig. 1, col. 5, lines 60-61, *the center menu item, the computer mode option, has been highlighted using the discreet navigational method*. Thus, the center menu item 66 is highlighted (an auxiliary object marker as claimed, fig. 5) by using the discrete keys 22 (an auxiliary control device as claimed fig. 1, col. 5, lines 60-61). The ability selects a

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menu item without having to active another key in the continuous keys (cursor control key as claimed, col. 6, lines 4-5). Thus, so as to designate a responsive object without affecting control of the main object marker as claimed. As stated *infra* with respect to claims 1 and 12, Examiner finds that Vaughan et al teaches the system menu 66 in this example includes three options: televisions mode, computer mode, and combination mode (col. 5, lines 56-57). Thus, Vaughan et al teach responsive object by responsive object as claimed.

In response to applicant's argument that "the Examiner must meet in order to establishing a *prima facie* case of obviousness..." page 11. In response, Examiner disagrees because a *prima facie* case of obvious is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art. Once such a case is established, it is incumbent upon appellant to go forward with objective evidence of unobviousness. See In re Fielder, 471 F.2d 640, 176 USPQ 300 (CCPA 1973). See In re Palmer, 172 USPQ 126 (CCPA 1971). See In re Reven, 156 USPQ 679 (CCPA 1968).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it would have

been obvious to a person of ordinary skill in the art at the time of the invention to replace the auxiliary control device in Clark with the arrow keys 22 or 28 of Vaughan et al including the center menu item, the computer mode option, has been highlighted using the discreet navigational method, the ability selects a menu item without having to active another key in the continuous keys, in view of the teaching in the Vaughan's reference because this would provide a simpler and quicker way for a user to select a menu item as taught by Vaughan et al (col. 6, lines 6-7). Moreover, where the claimed differences involve substitution of interchangeable equivalents and the reason for the selection of one equivalent for another was not to solve an existent problem such substitution has been judicially determined to have been obvious. See In re Ruff, 118 USPQ 343 (CCPA 1958).

In response to applicant's argument that Clark does not teach "an auxiliary control device including a discrete moving mechanism configured to cause a discrete displacement of an auxiliary object marker on the display, responsive object by responsive object, so as to designate a responsive object without affecting control of the main object marker", at page 10, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

In response to applicant's argument that dependent claims 6 and 17 only recite the limitation "*the main object marker has priority over the auxiliary object marker.*" This argument is not persuasive because applicant only argues the limitation in independent

claims 1 and 12 recite "an auxiliary control device including a discrete moving mechanism configured to cause a discrete displacement of an auxiliary object marker on the display, responsive object by responsive object, so as to designate a responsive object without affecting control of the main object marker." Therefore, as stated *supra* with respect to claims 1 and 12, the combination of Clark and Vaughan et al meet the limitation as stated above.

In response to applicant's argument that dependent claims 10 and 21 only recite the limitation "*the key is activated during an emergency mode of the aircraft.*" This argument is not persuasive because applicant only argues the limitation in independent claims 1 and 12 recite "an auxiliary control device including a discrete moving mechanism configured to cause a discrete displacement of an auxiliary object marker on the display, responsive object by responsive object, so as to designate a responsive object without affecting control of the main object marker." Therefore, as stated *supra* with respect to claims 1 and 12, the combination of Clark and Vaughan et al meet the limitation as stated above.

For these reasons, the rejections based on Clark, Vaughan et al, Yoshino et al, Oder et al, and Muller et al have been maintained.

Conclusion

18. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within


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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin M. Nguyen whose telephone number is 571-272-7697. The examiner can normally be reached on MON-THU from 9:00-6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick N. Edouard can be reached on 571-272-76036725. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the Patent Application Information Retrieval system, see <http://portal.uspto.gov/external/portal/pair>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


PATRICK N. EDOUARD
SUPERVISORY PATENT EXAMINER

Kevin M. Nguyen
Patent Examiner

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KMN
February 1st, 2005